consideration of the application in accordance with the provisions of 37 CFR § 1.496(b) is respectfully requested.

Respectfully submitted,

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MARKED UP COPY OF AMENDED CLAIMS

1. (amended) A method for replication of a target region of a target DNA molecule comprising the steps of:

(a) introducing a D-loop into the target duplex DNA molecule at a first initiation point adjacent to the target region in a reaction mixture, wherein the step of introducing a D-loop is performed by hybridizing the duplex DNA molecule with a first oligonucleotide primer which is substantially complementary to the first initiation site;

(b) adding proteins to the reaction mixture to assemble a replisome at the D-loop; and

(c) providing DNA monomers and ATP to the replisome, whereby the target region is reproduced, and further comprising the step of introducing a second D-loop by hybridizing the duplex DNA molecule with a second oligonucleotide primer which is substantially complementary to a second initiation site, said target region lying between the first and second initiation sites.

4. (amended) The method of claim [3] 1, wherein the first oligonucleotide primer has a length of from 20 to 50 bases.

5. (amended) The method of claim [3] 1, wherein the first oligonucleotide primer comprises a detectable label or capture moiety.

7. (amended) The method of claim [6] 1, wherein the first and second oligonucleotide primers each have a length of from 20 to 50 bases.

8. (amended) The method of claim [6] 1, wherein at least one of the oligonucleotide primers comprises a detectable label or capture moiety.

9. (amended) The method of claim [6] 1, wherein the replication is performed in a supporting matrix.

10. (amended) The method of claim [6] 1, wherein the replisome is assembled via the action of primosomal proteins, single-stranded DNA-binding protein and the DNA polymerase III holoenzyme.